

**Notice of Allowability**

Application No.

09/586,433

Examiner

Dwin M. Craig

Applicant(s)

BORTFELD, ULRICH

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/17/2005.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☒ The drawings filed on 6/2/2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

**DETAILED ACTION**

**And**

**EXAMINERS REASONS FOR ALLOWANCE**

1. Claims 1-17 are Allowed.

**REASONS FOR ALLOWANCE**

2. The following is an examiner's statement of reasons for allowance:

The following limitations, in combination with other limitations, are neither anticipated nor made obvious by the prior art. *"creating a programming model of said memory component and said processor component"* in combination with *"wherein said simulation environment is a cycle accurate simulation environment"* in combination with *"running said unified simulation as a single process"* and further in combination with, *"the processor component communicates through a transaction based interconnect"*. Further, it is noted by the Examiner that Applicants specification on page 11 specifically discloses the definition of what a cycle accurate simulation is in the context of Applicant's preferred embodiment as well as on page 12 of the specification is the definition of the transaction based interconnection as defined by the Applicant. The Examiner further notes that Applicant's arguments, presented in the 12/6/2004 response on pages 3 & 4, *"In the present invention, a single simulation environment can advantageously simulate both the hardware components (memory and processor) as well as a software component (the operating system application). Also, since the unified simulation environment runs as one process, simulation time is advantageously reduced and debugging is advantageously simplified."* The prior art does not provide a proper motivation to combine the Applicant's argued definition of a *unified simulation* with the prior art that teaches the use of *cycle accurate*

Art Unit: 2123

*simulators*. This particular argument, in combination with Applicant's previous arguments and instant amendments to the claim language have been, in combination, persuasive and the therefore the combination of the current claimed limitations is allowable.

**2.1** Dependent **Claims 2-6, 8-10, 13, 14, 16 and 17** are allowable as they depend from allowed base claims.

**2.2** Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**2.3** The prior art references were provided by the Examiner as listed in the "Notice of References Cited" PTO form 892 as they disclose methods of performing *co-verification* in simulators for modeling and testing software and hardware combinations, and in some cases using a *cycle accurate simulator*.

### **Conclusion**


**3.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwain M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2123

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC

 7/25/05  
Paul L. Rodriguez  
Primary Examiner  
Art Unit 2125